

# Key Elements of the Clean Air Act and the Importance of Voluntary Programs






Heavy Duty Fleets: Retrofitted, Refueled, and Funded for a Cleaner Ohio - November 30<sup>th</sup>, Columbus, Ohio

# FY2006 Priorities

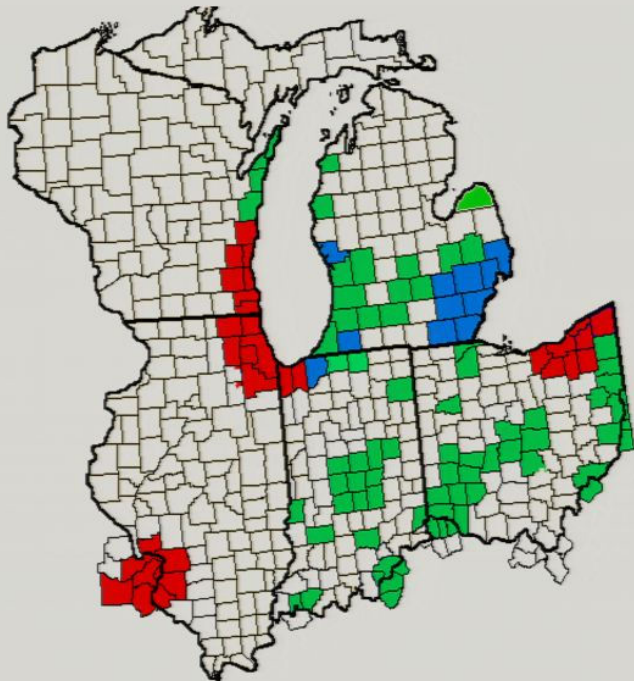
- Implement 8-hr Ozone, PM<sub>2.5</sub> and Regional Haze Programs
- Implement the Clean Air Interstate Rule
- Implement the Clean Air Mercury Rule
- Implement the Integrated National Ambient Air Monitoring Strategy
- Reduce Emissions from Existing Diesel Engines and Equipment
- Implement Air Toxics Initiatives that focus on Multi-Media and Cumulative Risk
- Title V permits
- Implement Voluntary Programs and Initiatives

# Region 5 Ozone Nonattainment Areas

-  Moderate areas.
-  Marginal areas.
-  Subpart 1 or  
“Basic” areas.

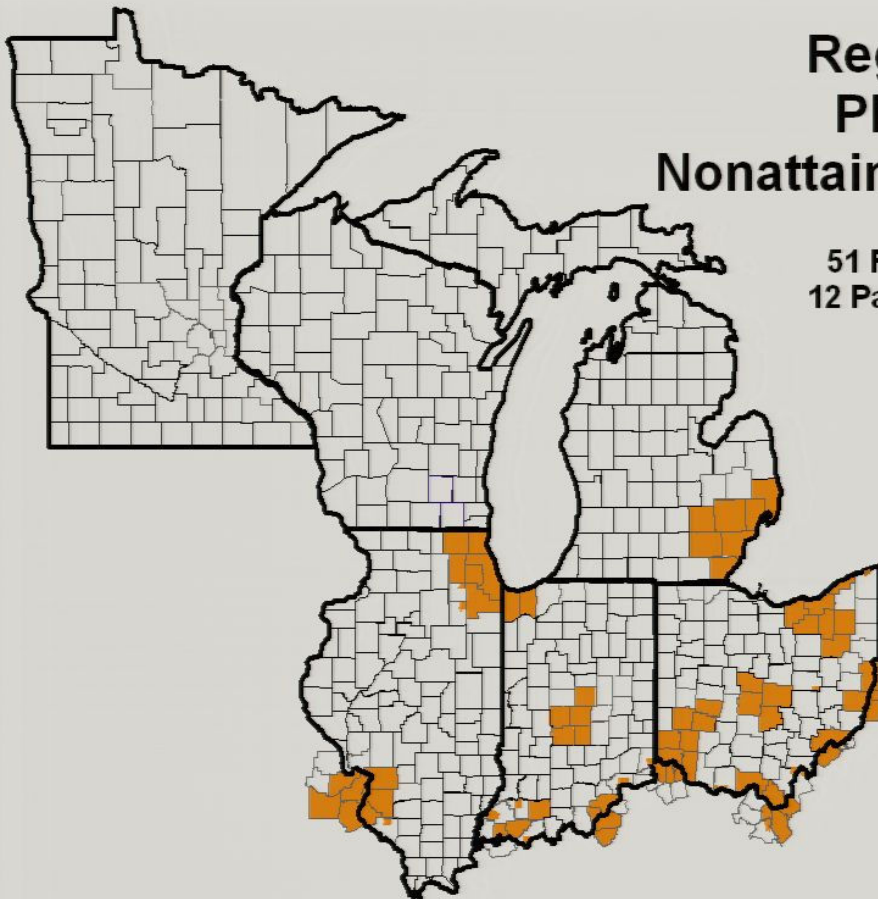
101 Full Counties

3 Partial Counties

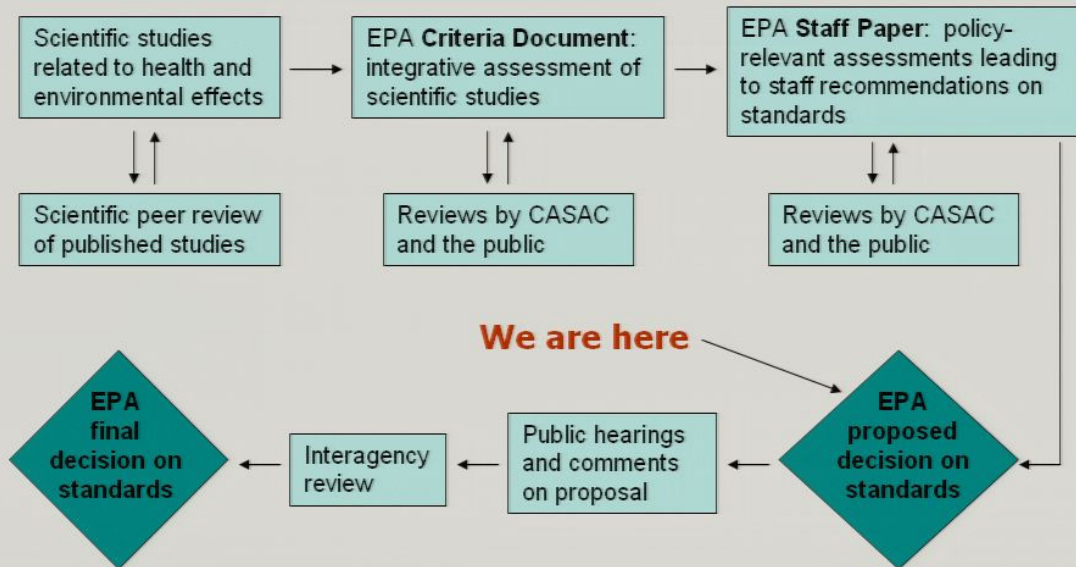


# Region 5 PM 2.5 Nonattainment Areas

51 Full Counties  
12 Partial Counties



# PM NAAQS Review: Process



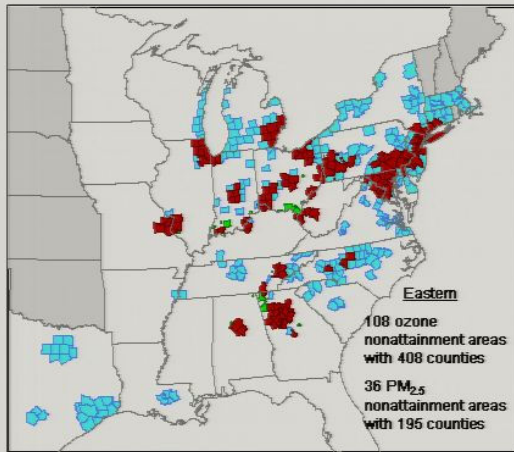
# Summary of the Clean Air Interstate Rule

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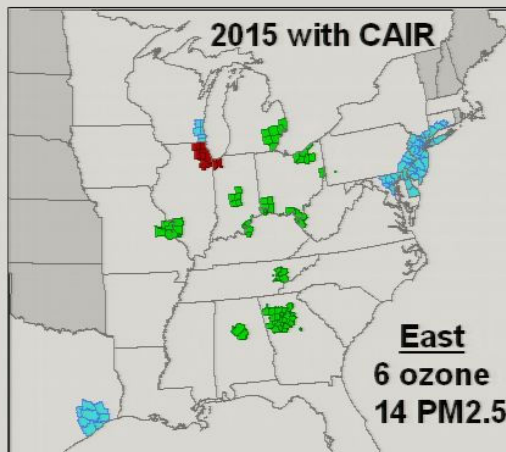
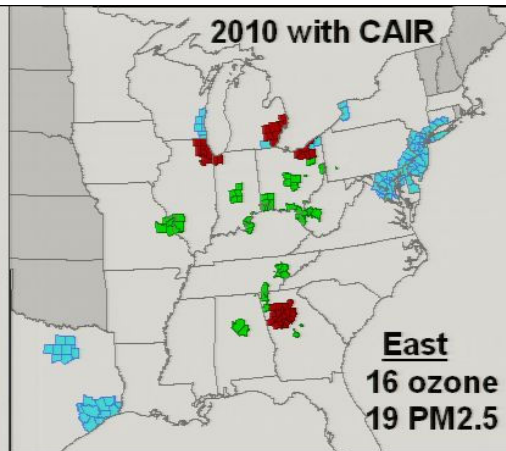
- CAIR will permanently cap emissions of sulfur dioxide ( $\text{SO}_2$ ) and nitrogen oxides ( $\text{NO}_x$ ) in the eastern United States.
- CAIR achieves large reductions of  $\text{SO}_2$  and/or  $\text{NO}_x$  emissions across 28 eastern states and the District of Columbia.
- When fully implemented, CAIR will reduce  $\text{SO}_2$  emissions in these states by over 70 percent and  $\text{NO}_x$  emissions by over 60 percent from 2003 levels.
- This will result in \$85 to \$100 billion in health benefits and nearly \$2 billion in visibility benefits per year by 2015 and will substantially reduce premature mortality in the eastern United States. The benefits will continue to grow each year with further implementation.







*Projected  
 NAs  
 in 2010  
 and 2015  
 after  
 reductions  
 from  
 CAIR  
 and  
 existing  
 CAA  
 programs*



## Ozone & Fine Particle Nonattainment (Apr. 05)

**CAIR and Other CAA Programs Will Help Bring Many Eastern Areas into Attainment - However, a number of areas are projected to not attain through 2010 and 2015**

- Nonattainment areas for 8-hour ozone pollution only
- Nonattainment areas for fine particle pollution only
- Nonattainment areas for both 8-hour ozone and fine particle pollution

Projections concerning future levels of air pollution in specific geographic locations were estimated using the best scientific models available. They are estimations, however, and should be characterized as such in any description. Actual results may vary significantly if any of the factors that influence air quality differ from the assumed values used in the projections shown here.

# LADCO Process

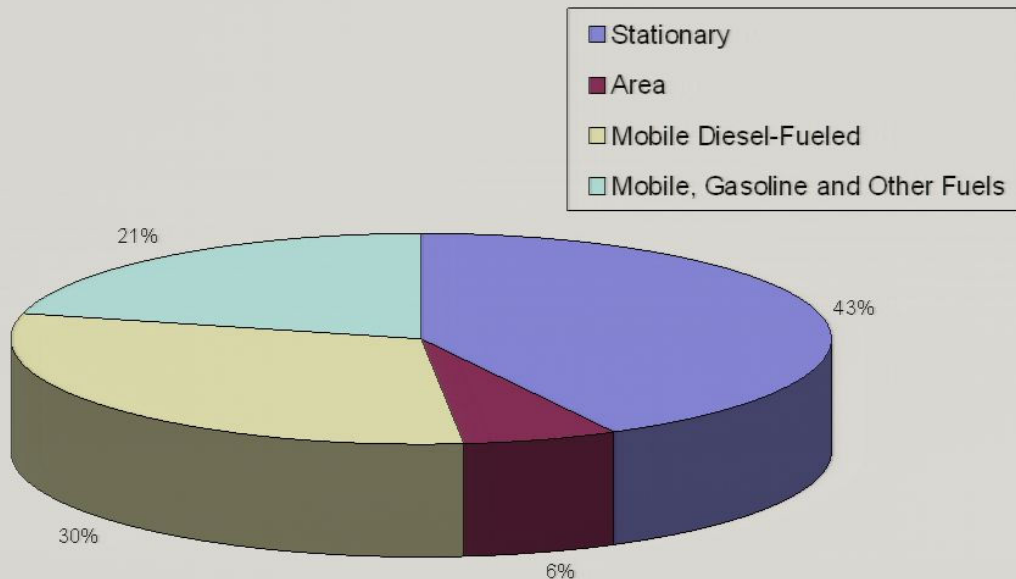
- Lake Michigan Air Directors Consortium
  - <http://www.ladco.org/>
  - Forum for Midwest states to develop plans to meet the standards
  - Inventory, modeling, technical assistance, control strategy assessment, transparency
- Regional Workshops
- Technical and Qualitative Analyses for Mobile Source Control Measures



# Midwest Clean Diesel Initiative

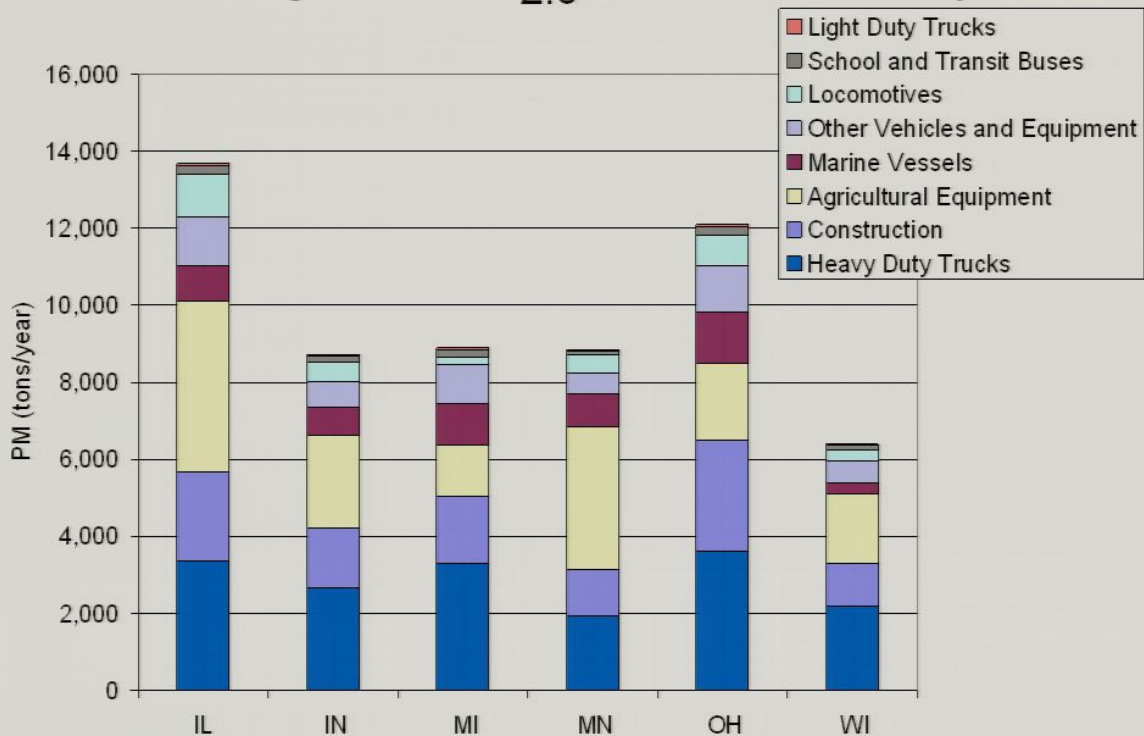
- Public-private partnership to accelerate diesel emission reductions in the Midwest
  - Diesel exhaust contributes to ozone, particulate matter, and air toxics
  - Exacerbates asthma, causes respiratory and cardiovascular illness and contributes to premature deaths
  - Likely human carcinogen

# Regional NO<sub>x</sub> Emissions Inventory



Source: USEPA, National Emissions Inventory, 2001

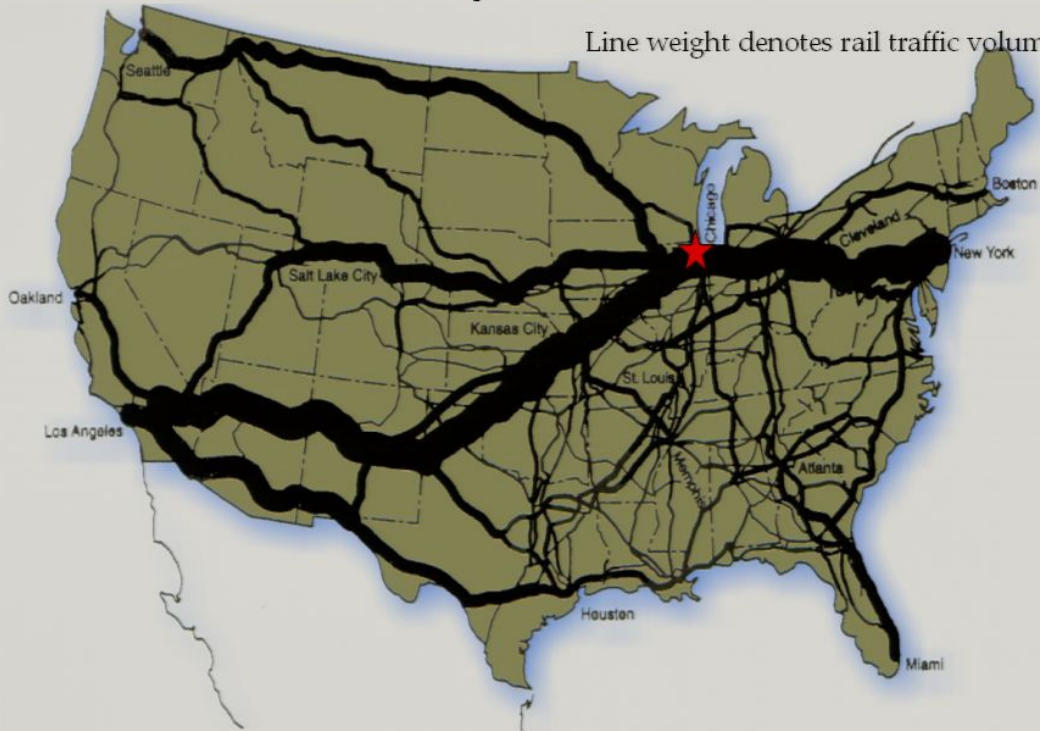
# Diesel Engine PM<sub>2.5</sub> Emissions by State



Source: USEPA, National Emissions Inventory, 2001

# Asia-Europe Container Hub

Line weight denotes rail traffic volume.



Source: World Business Chicago

# Midwest Clean Diesel Initiative

- Approximately 3.3 million diesel engines in Region 5
- The goal is to reduce emissions from 1,000,000 diesel-powered engines by 2010
- Targeted sectors: Ports, Agriculture/Grain Transport, and Rail
- Southeast Michigan/Canada Border Crossing
- Reducing emissions and improving fuel economy through cleaner fuels, technological and operational improvements helps a company's bottom line while improving the quality of the air we breathe
- Continue work on school buses, municipal vehicles

# Midwest Clean Diesel Initiative

## Power of Partnerships



Illinois Environmental  
Protection Agency



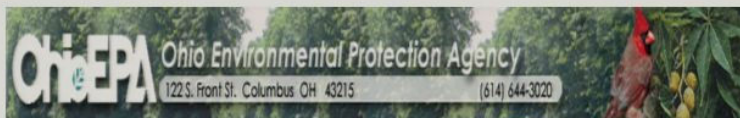
Indiana Department of  
Environmental Management



Department of  
Environmental Quality



Minnesota Pollution Control Agency





# Midwest Clean Diesel Initiative Accomplishments

- Partners are implementing many cost-saving and cost-effective strategies to reduce diesel emissions in the Midwest
- \$1.1 million to school districts across the Region – Clean School Bus USA
- \$3.6 million in Federal Supplemental Environmental Projects
- 56 SmartWay partners in the Midwest

